

A FEEDING TECHNIQUE OF THE BROWN HONEYEATER (*LICHMERA INDISTINCTA*)

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Brown Honeyeaters are one of the most widespread species of honeyeater in Australia and are common in the Kimberley region of Western Australia. In August 2011 while camped with my wife near a creek (17°08'59"S 125°12'12"E) off the Gibb River Road, we noticed Brown Honeyeaters coming into a *Brachychiton viscidulus* tree (commonly referred to as Sticky Kurrajong or Kimberley Rose) in bloom near our camp. These small deciduous trees endemic to the Kimberley, grow to about 7m in height. Their inflorescence is cauliflorous with 10–40 flowers on each node providing spectacular shows of large pink to red bell-like flowers when leafless during winter and spring (Wheeler 1992). They prefer rocky areas associated with the Devonian Reef System and sandstone or basalt commonly found along the Gibb River Road. As we watched, I noticed Brown Honeyeaters appeared to be more interested in the base of the flowers rather than the top. On closer examination, I could see a number of flowers had a hole pierced in the calyx and Brown Honeyeaters, instead of accessing the nectaries at the base of the sepals in the conventional manner, were bypassing repro-

ductive parts of the flower and taking nectar through the pierced hole. The only other honeyeaters in the area attracted to the flowers of the brachychiton tree were Little Friarbirds *Philemon citreogularis* and White-gaped Honeyeaters *Lichenostomus unicolor*. Both these species probed down the throat of the flowers in the style one usually associates with nectar seeking birds – and were not seen to use the pierced holes.

Intrigued by this discovery we spent some time (about 30 minutes) observing and taking photographs (see photos 1–4). We found that three to four Brown Honeyeaters repeatedly came into the tree, flying directly to flowers with pierced holes in the calyx without attempting in any way to access other flowers. However we could not tell if they were the same birds.

Over a number of years I have been puzzled when seeing holes with scarring around them in older aged *Brachychiton viscidulus* flowers, and wondered at the cause. I erroneously speculated that insects, possibly caterpillars rather than birds, may have been responsible for the holes during the budding stage of the flower.



LEFT: The pierced calyx of a *Brachychiton viscidulus* flower and a Brown Honeyeater.

BELOW: A Brown Honeyeater accessing nectar through a hole pierced in the calyx of a *Brachychiton viscidulus* flower. A second hole can be seen on the same flower.



LEFT: A Brown Honeyeater probing into a *Brachychiton viscidulus* flower. Scarring around the hole in an earlier flower can be seen on the right of the stem.



RIGHT: A Brown Honeyeater approaching a flower with a hole pierced in it.

DISCUSSION

There have been other reports of flower piercing by honeyeaters in Australia. In the *Argus* newspaper in 1929, there was a delightful article by Edith Coleman, in which she told her readers of the visitations to her garden of Eastern Spinebills *Acanthorhynchus tenuirostris*, mentioning that they pierced the base of her Snap Dragons *Antirrhinum* sp. for nectar (Coleman 1929). In *Fauna of Tasmania*, Green (1995) also mentions Eastern Spinebills puncturing the base of tubular flowers. Anecdotally from other sources it would appear this feeding technique by Eastern Spinebills is relatively well known.

In other suburban gardens in Eastern Australia, Yellow-faced Honeyeaters, *Lichenostomus chrysops*, have been recorded piercing the base of garden flowers such as Foxgloves – and White-plumed Honeyeaters *Lichenostomus penicillatus* piercing the long blooms of Fuchsias to reach nectar (Kloot and McCulloch 1980), in a manner similar to Eastern Spinebills.

There does not appear to be much information on how widespread the practise of flower piercing is by other species of honeyeaters. Most of the data available relates to Eastern Australia and long tubular flowers rather than bell shaped flowers. On referring to the information in *Handbook of Australian, New Zealand & Antarctic Birds* (Higgins et al. 2001), we find White-eared

Honeyeater *Lichenostomus leucotis* when feeding on tubular flowers of Mountain Devil *Lambertia formosa*, have been observed to extract nectar by piercing the base of the perianth, not by inserting the bill into the perianth (Recher and Abbott 1970). White-plumed Honeyeaters *Lichenostomus penicillatus* sometimes pierce the base of tubular flowers such as *Tecoma*, *Correa* and *Lachenalia* or slit the flower from tip to base to access nectar (McCulloch 1977). Hindwood (1944) recorded Black-chinned Honeyeaters *Melithreptus gularis* piercing *Tecoma* and *Crotalaria*. Brown-headed Honeyeaters *Melithreptus brevirostris* and White-naped Honeyeaters *Melithreptus lunatus* have been known to peck slits at the base of the corolla of Mountain *Correa* to access nectar (Loyn 1985) and sometimes pierce bases of tubular flowers to reach nectar (Le Souef & Macpherson 1920). In Central Australia Grey Honeyeaters, *Conopophila whitei*, sometimes feed on *Eremophila* sp. by puncturing a hole in the side, not mouth, of tubular flowers (Roberts 1981).

CONCLUSION

There appears to be no mention of this feeding technique by Brown Honeyeaters in HANZAB or by Johnstone and Storr in *Birds of Western Australia* and it would be interesting to know if others have observed species other than Brown Honeyeaters

piercing the flowers of *Brachychiton viscidulus*, how widespread the practise is in the North of Western Australia and if other flowering plants with bell shaped flowers are similarly accessed. On several occasions I have noticed an unexplained hole at the base of flowers in the Malvaceae family. While there were many flowers on the tree we examined on the Gibb River Road, not all had been pierced – I estimated about fifteen.

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